

NOMENCLATURE OF THE WEEPING HIMALAYAN CYPRESS
(**CUPRESSUS**, **CUPRESSACEAE**).

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The genus **Cupressus** has long been known to occur in the Himalayan region. However, only one species known as **C. torulosa** Don has been correctly described from the western Himalayas. A second species known as having markedly pendulous branchlets and cultivated fairly extensively in the eastern Himalayas has never been properly described according to the ICBN. The **Cupressus** species known from the eastern Himalayas is markedly distinct in its pendulous branchlets and has only been recently discovered wild in Bhutan. A formal diagnosis and description is now needed to differentiate and to validly describe this over-looked species.

The earliest herbarium collections of the Weeping Himalayan Cypress present in European herbaria were made by Griffith in Bhutan. Griffith collected specimens from a cultivated tree near Dewangiri in January 1939 and noted it as having drooping branches. Later, Griffith (1848) named the plant **Cupressus pendula** Griff. as a new name. Unfortunately the name published by Griffith is antedated by the older homonym **C. pendula** Thunb. (1783), belonging to an altogether different genus and species.

Ten years after Griffith's collections, J.D. Hooker and T. Thompson collected specimens of a weeping **Cupressus** species cultivated in Sikkim. Hooker (1854) referred the specimens as **Cupressus funebris** Endl. and stated the species was imported to Sikkim and Bhutan from Tibet. In this reference Hooker also noted the cultivated cypresses of the eastern Himalayas as having weeping limbs.

Knight and Perry (1850) described other Asiatic **Cupressus** species based on cultivated plants in Europe. The names **C. corneyana** and **C. majestica** were based on trees with drooping branches cultivated in Europe. The origin of the former was given as Japan or the north of China, the latter species origin was unknown. It is true the original description of these two names is quite vague, but neither name was applied to material from the Himalayas. Later, Carriere (1855) further described **C. corneyana** and **C. majestica** and states the origin of these taxa is unknown. Unfortunately, no type specimens are available in any herbaria of these two named species and I am convinced they were not based on any material collected from the Himalayas. Rather, these names seem to be misapplied to the Himalayan species by several authors.

Carriere (1867) described yet another species as **C. cashmeriana** Royle based on a young plant cultivated in France and supposedly unknown in the wild or possibly native to Tibet. The original description of **C. cashmeriana** is quite vague, the species is described as having pendulous branches, glaucous foliage and acute leaves. No other morphological characteristics such as male and female cones are listed in the type description. Unfortunately, no type herbarium material is available for the name **C. cashmeriana**.

Further, Carriere (1867) cites the name *C. torulosa* Gordon in synonymy. The *Cupressus* described by Gordon (1858) is described from northwest India and would thus not seem to refer to the weeping eastern Himalayan cypress from Sikkim and Bhutan at all. The description by Gordon (1858) seems to be more typical of *C. torulosa* Don from the western Himalayas. One might suppose that the weeping branchlets and acute leaves described in the type description of *C. cashmeriana* might allude to the eastern Himalayan weeping cypress, though without further details in the description this seems very uncertain. Other Asiatic *Cupressus* species have variously been described as having pendulous branchlets and acutish leaves, hence Franco (1969) included many synonyms under one species. That Carriere (1867) originally had in mind when describing *C. cashmeriana* seems quite undeterminable and was almost certainly not based on material from the eastern Himalayan region. Long (1980) states that *Cupressus* cultivated in Bhutan and Sikkim lack the pale glaucous foliage of the plant in Europe under the name *Cupressus cashmeriana*.

Mitchell (1972) well describes the cultivated plants in Europe long known under the names *Cupressus cashmeriana* and *C. torulosa* var. *corneyana* (or *C. corneyana*). The former is described as having pale glaucous foliage, the latter is described as having yellowish foliage and twisted branchlets. These features are not at all typical of herbarium specimens of cultivated *Cupressus* in the eastern Himalayas.

Hence, Silba (1981) recognized three separate entities here. After seeing further herbarium material at Edinburgh I realized this even further. The earliest herbarium specimen from cultivated trees in Europe accurately labeled *C. corneyana* I could trace is Shuttleworth s.n. (BM) from southern France. The Shuttleworth specimen is typical of *C. lusitanica* Mill. in leaf and cone characteristics. Similarly, in raising seedlings of cultivated trees labeled *C. corneyana* in England, France and Australia I have found that these always had 3-4 cotyledons. The cotyledon number is thus typical of the New World cypresses, especially *C. lusitanica* (Silba, 1983).

In conclusion, the name *C. corneyana* was in my opinion based on odd cultivated specimens of *C. lusitanica* in Europe. The name *C. cashmeriana* is untraceable to any Himalayan material and was only vaguely described in the type description.

Cooper (1933) was the first collector that suggested *Cupressus* may be wild in Bhutan. Later, *Cupressus* was finally described wild in the eastern Himalayas in Bhutan and described by Long (1980). From what is explained above a new name should be published for the *Cupressus* endemic to Bhutan which has thus far never been validly published.

***Cupressus himalaica* J. Silba, sp. nova.**

Arbor 20-45 m. alta. Ramulis longe pendulis ramusculis confertis, plane distichus, juvenilibus subcompressis adultis torulosus. Folia polymorpha, glandulosa; juvenilia acuminata, squarrosa, glauca, 2-3 mm. longis, lateralia conduplicata mediana subcomplanata; adulta convexa obtusa, apice adnata, 1-1.5 mm. longis. Flores masculi 3-5 mm. longis et 2-2.5 mm. latis, staminibus 14-18. Strobilis ovulatis 12-20 mm. longis et 15-17 mm. latis, squamis 8-10.

Type: Bhutan, Norbding, below Pele La, 2250 m., **Grierson & Long 1079** (Holo-E).

Paratypes: Bhutan, Dewangiri, **Griffith 27** (K); Bhutan, Dukye Dzong, N.W. of Paro, 2300 m., cult., **Grierson & Long 234** (E); Bhutan, Drug ye Dzong, Pao Chu, 2400 m., cult., **Ludlow, Sherriff & Hicks 16226** (E, BM); Bhutan, Mongar, 1800 m., **Grierson & Long 1984** (E).

A graceful tree 20-45 m. tall. Branches drooping, divided into long flattened chain-like segments. Foliage polymorphic, non-glandular; juvenile acuminate, somewhat glaucous, 2-3 mm. long, free at the apex; adult leaves bluntly acute, 1-1.5 mm. long, light or grassy green. Male cones oblong-cylindric, 3-5 mm. long by 2-2.5 mm. wide with 14-18 scales. Female cones dark brown, subglobose, 12-20 mm. long by 15-17 mm. wide, scales 8-10, umbos inconspicuous. Seeds with small wings.

Cupressus himalaica grows as high as 3000 m. in its native habitat in Bhutan.

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